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| APPLICATION NO.          | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|--------------------------|-------------|----------------------|-------------------------|------------------|
| 10/710,846               | 08/06/2004  | Eckhard Napp         | EP0209445               | 4845             |
| 30008                    | 7590        | 12/02/2005           | EXAMINER                |                  |
| GUDRUN E. HUCKETT DRAUDT |             |                      | FERGUSON, MICHAEL P     |                  |
| LONSSTR. 53              |             |                      | ART UNIT                | PAPER NUMBER     |
| WUPPERTAL, 42289         |             |                      | 3679                    |                  |
| GERMANY                  |             |                      | DATE MAILED: 12/02/2005 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                     |               |
|------------------------------|---------------------|---------------|
| <b>Office Action Summary</b> | Application No.     | Applicant(s)  |
|                              | 10/710,846          | NAPP, ECKHARD |
|                              | Examiner            | Art Unit      |
|                              | Michael P. Ferguson | 3679          |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-15 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 06 August 2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date: ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: ____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on August 23, 2002. It is noted, however, that applicant has not filed a certified copy of the PCT/EP02/09445 application as required by 35 U.S.C. 119(b).

### ***Drawings***

2. The drawings are objected to because of the following:

The cross-hatching of elements 24 in Figures 1b, 2b, 3b, 4b, 5b, 6b, 7b, 8b, 9b, 10b, 11b, 12b, 13b, 14b, 15b, 17b and 18a is improper based upon the material of such elements.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters 12, 14, 24, and 30, respectively, have each been used to designate numerous variations of the same part within the different embodiments in the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

4. The disclosure is objected to because of the following informalities:

In the specification, paragraph [0049] recites "of a sixth embodiment". It should recite of --of a twelfth embodiment--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-11,14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Swanson (US 1,459,189).

As to claim 1, Swanson discloses a connecting device for a first rod **55** and a second rod **55** to be connected to one another, the connecting device comprising:

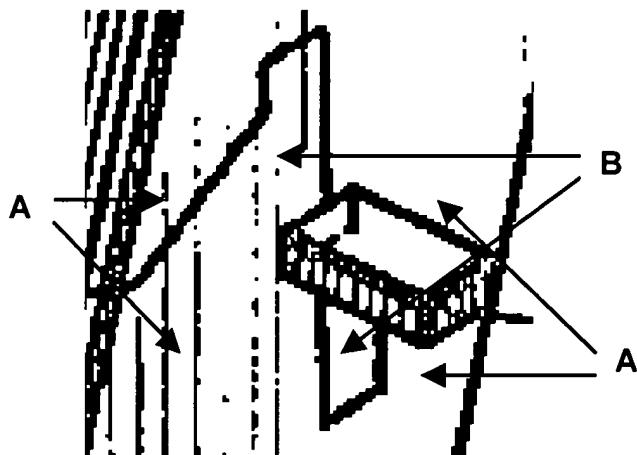
a first profile provided on the first rod and a second profile provided at the second rod, wherein the first and second profiles are configured to be joined in a connecting position along a partition line by being moved relative to one another in a direction of a predetermined degree of freedom, predetermined by the first profile and the second profile, wherein the first and second profiles are moved immediately before reaching the connecting position in the direction of the predetermined degree of freedom;

wherein the first profile and the second profile in the joined state define a cutout **A,B** (Figure 5 reprinted below with annotations) bridging the partition line and extending on both sides of the partition line;

a separate locking bar **34** having a cross-sectional shape matching a cross-section of the cutout;

wherein the first and second rods and form a unit of three components, wherein the locking bar is inserted into the cutout and provides a movability lock between the

three components of the unit in a locking direction opposite to the direction of the predetermined degree of freedom immediately before reaching the connecting position (Figure 5).



As to claim 2, Swanson discloses a connecting device wherein the first and second profiles each have an undercut **A** and wherein the first and second profiles engage one another in the connecting position by mutually engaging the undercut (Figure 5).

As to claim 3, Swanson discloses a connecting device wherein the first and second profiles each have an undercut **B** and wherein the locking bar **34** engages the undercut of the first and second profiles (Figure 5).

As to claim 4, Swanson discloses a connecting device wherein the first and second profiles each have a first undercut **A** and a second undercut **B**, wherein the first and second profiles engage one another by mutually engaging the first undercut, and wherein the locking bar **34** engages the second undercut, respectively (Figure 5).

As to claim 5, Swanson discloses a connecting device wherein a longitudinal axis of the locking bar **34** extends perpendicularly to the direction of the predetermined degree of freedom (Figure 5).

As to claim 6, Swanson discloses a connecting device wherein a longitudinal axis of the locking bar extends at a slant (angle) to the direction of the predetermined degree of freedom (Figure 5).

As to claim 7, Swanson discloses a connecting device wherein the first and second rods **55** are joined at an acute angle, an obtuse angle or a right angle relative to one another (Figure 5).

As to claim 8, Swanson discloses a connecting device wherein four (not shown) of the first and second rods **34** are joined to form a frame (Figure 5).

As to claim 9, Swanson discloses a connecting device wherein the locking bar **34** is removable from the cutout **B** (Figure 5).

As to claim 10, Swanson discloses a connecting device wherein the locking bar **34** is non-releasable (locked in position due to friction-fit) once inserted into the cutout **B** (Figure 5).

As to claim 11, Swanson discloses a connecting device wherein the locking bar **34** has a cross-section selected from the group consisting of a rectangular shape, a circular shape, a diamond shape, a figure eight shape, a dovetail shape, an elliptical shape, and a cross shape (Figure 5).

As to claim 14, Swanson discloses a connecting device wherein the first and second profiles in the joined state have rotation symmetry (Figure 5).

As to claim 15, Swanson discloses a connecting device wherein first and second rods **55** and the locking bar **34** are made of one of the materials selected from the group consisting of metal (cross-section; Figure 2), wood, and plastic material.

7. Claims 1 and 5-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Jungers et al. (US 4,052,832).

As to claim 1, Jungers et al. disclose a connecting device for a first rod **16** and a second rod **17** to be connected to one another, the connecting device comprising:

a first profile provided on the first rod and a second profile provided at the second rod, wherein the first and second profiles are configured to be joined in a connecting position along a partition line by being moved relative to one another in a direction of a predetermined degree of freedom, predetermined by the first profile and the second profile, wherein the first and second profiles are moved immediately before reaching the connecting position in the direction of the predetermined degree of freedom;

wherein the first profile and the second profile in the joined state define a cutout **40,42,44,46** bridging the partition line and extending on both sides of the partition line;

a separate locking bar **18** having a cross-sectional shape matching a cross-section of the cutout;

wherein the first and second rods and form a unit of three components, wherein the locking bar is inserted into the cutout and provides a movability lock between the three components of the unit in a locking direction opposite to the direction of the predetermined degree of freedom immediately before reaching the connecting position (Figures 1,2 and 11).

As to claim 5, Jungers et al. disclose a connecting device wherein a longitudinal axis of the locking bar **18** extends perpendicularly to the direction of the predetermined degree of freedom (Figure 2).

As to claim 6, Jungers et al. disclose a connecting device wherein a longitudinal axis of the locking bar **18** extends at a slant (angle) to the direction of the predetermined degree of freedom (Figure 2).

As to claim 7, Jungers et al. disclose a connecting device wherein the first and second rods **16,17** are joined at an acute angle, an obtuse angle or a right angle relative to one another (Figure 2).

As to claim 8, Jungers et al. disclose a connecting device wherein four of the first and second rods **16,17** are joined to form a frame (Figure 11).

As to claim 9, Jungers et al. disclose a connecting device wherein the locking bar **18** is removable from the cutout **40,42,44,46** (Figure 2).

As to claim 10, Jungers et al. disclose a connecting device wherein the locking bar **18** is non-releasable (locked in position due to friction-fit) once inserted into the cutout **40,42,44,46** (Figure 1).

As to claim 11, Jungers et al. disclose a connecting device wherein the locking bar **18** has a cross-section selected from the group consisting of a rectangular shape, a circular shape, a diamond shape, a figure eight shape, a dovetail shape, an elliptical shape, and a cross shape (Figure 2).

As to claim 12, Jungers et al. disclose a connecting device wherein the first and second rods **16,17** are hollow and comprise reinforcements **48,50** arranged near the connecting location (Figure 2).

As to claim 13, Jungers et al. disclose a connecting device wherein the reinforcements **48,50** are hollow rods or solid rods matched to a hollow interior of the first and second rods **16,17**, wherein the reinforcements fully contact an inner surfaces of the first and second rods or contact the inner surface along two lines in a longitudinal direction of the hollow interior, wherein the reinforcements are arranged across an entire length of the first and second rods or across a portion of the entire length of the first and second rods (Figure 2).

As to claim 14, Jungers et al. disclose a connecting device wherein the first and second profiles in the joined state have rotation symmetry (Figure 1).

As to claim 15, Jungers et al. disclose a connecting device wherein first and second rods **16,17** and the locking bar **18** are made of one of the materials selected from the group consisting of metal, wood, and plastic material.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to connecting devices:

Beabes (US 1,126,351), Wetsel et al. (US 5,603,586), Martensson (US 6,763,643) and Sattlberger (DE 40 27 674) are cited for pertaining to devices comprising first and second rods having a cutout, and a locking bar.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*MPF*  
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11/16/05

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